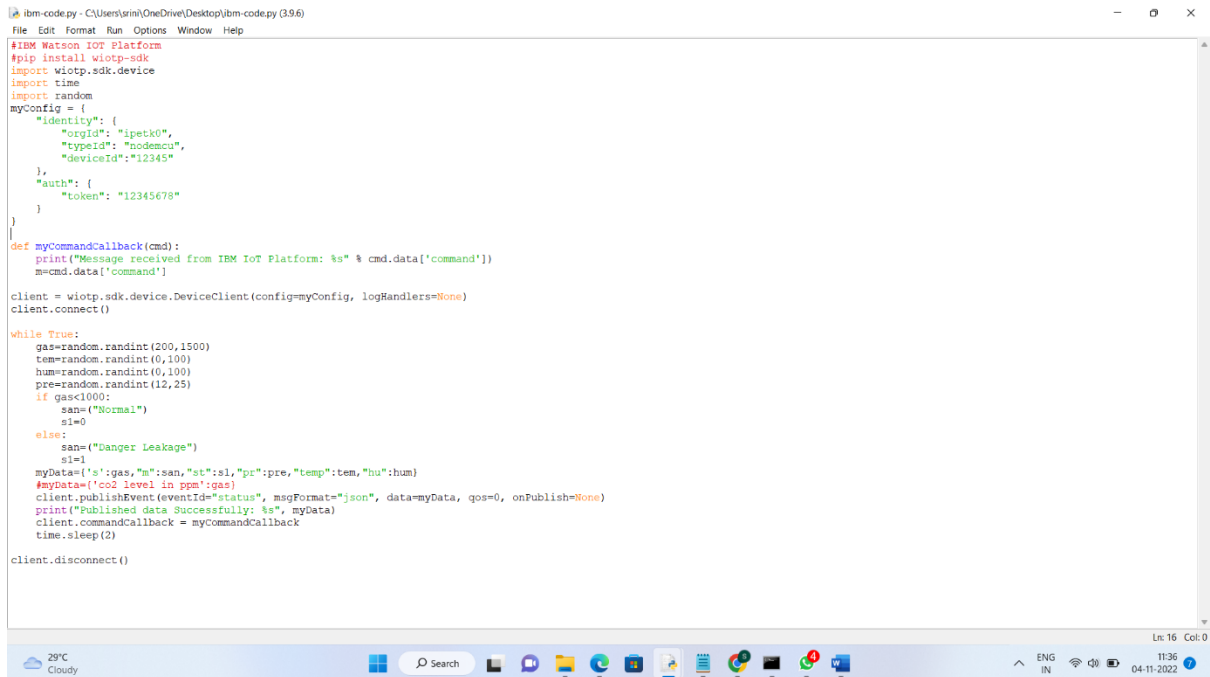


## SPRINT – 1

DATE	29/10/2022
TEAM ID	PNT2022TMID22887
PROJECT NAME	GAS LEAKAGE MONITORING & ALERTING SYSTEM FOR INDUSTRIES
MAXIMUM MARKS	2

## PYTHON SCRIPT



```
ibm-code.py - C:\Users\srini\OneDrive\Desktop\ibm-code.py (3.9.6)
File Edit Format Run Options Window Help

#IBM Watson IOT Platform
#pip install wiotp-sdk
import wiotp.sdk.device
import time
import random

myConfig = {
    "identity": {
        "orgId": "ipetk0",
        "typeId": "nodemcu",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
}

def myCommandCallback(cmd):
    print("Message received from IBM IoT Platform: %s" % cmd.data['command'])
    m=cmd.data['command']

client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
    gas=random.randint(200,1500)
    tem=random.randint(0,100)
    hum=random.randint(0,100)
    pre=random.randint(12,25)
    if gas<1000:
        san=("Normal")
        si=0
    else:
        san=("Danger Leakage")
        si=1
    myData={'s':gas,"m":san,"st":si,"pr":pre,"temp":tem,"hu":hum}
    #myData={'co2 level in ppm':gas}
    client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
    print("Published data Successfully: %s", myData)
    client.commandCallback = myCommandCallback
    time.sleep(2)

client.disconnect()
```

#IBM Watson IOT Platform

#pip install wiotp-sdk

import wiotp.sdk.device

import time

import random

myConfig = {

    "identity": {

        "orgId": "ipetk0",

```

        "typeId": "nodemcu",
        "deviceId": "12345"
    },
    "auth": {
        "token": "12345678"
    }
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```

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def myCommandCallback(cmd):
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client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

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while True:
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```

    gas=random.randint(200,1500)
    tem=random.randint(0,100)
    hum=random.randint(0,100)
    pre=random.randint(12,25)

```

```
if gas<1000:
```

```

    san=("Normal")
    s1=0

```

```
else:
```

```

    san=("Danger Leakage")
    s1=1

```

```
myData={'s':gas,"m":san,"st":s1,"pr":pre,"temp":tem,"hu":hum}
```

```
#myData={'co2 level in ppm':gas}
```

```
client.publishEvent(eventId="status", msgFormat="json", data=myData, qos=0, onPublish=None)
```

```
print("Published data Successfully: %s", myData)
```

```
client.commandCallback = myCommandCallback
```

```
time.sleep(2)
```

```
client.disconnect()
```

# SCRIPT OUTPUT

```

IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Published data Successfully: $s {'s': 1176, 'm': 'Danger Leakage', 'st': 1, 'pr': 17, 'temp': 94, 'hu': 15}
Published data Successfully: $s {'s': 1070, 'm': 'Danger Leakage', 'st': 1, 'pr': 15, 'temp': 44, 'hu': 5}
Published data Successfully: $s {'s': 1315, 'm': 'Danger Leakage', 'st': 1, 'pr': 20, 'temp': 72, 'hu': 40}
Published data Successfully: $s {'s': 448, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 33, 'hu': 16}
Published data Successfully: $s {'s': 1187, 'm': 'Danger Leakage', 'st': 1, 'pr': 17, 'temp': 34, 'hu': 72}
Published data Successfully: $s {'s': 1099, 'm': 'Danger Leakage', 'st': 1, 'pr': 24, 'temp': 63, 'hu': 49}
Published data Successfully: $s {'s': 1412, 'm': 'Danger Leakage', 'st': 1, 'pr': 16, 'temp': 2, 'hu': 67}
Published data Successfully: $s {'s': 328, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 66, 'hu': 74}
Published data Successfully: $s {'s': 1434, 'm': 'Danger Leakage', 'st': 1, 'pr': 16, 'temp': 10, 'hu': 3}
Published data Successfully: $s {'s': 1085, 'm': 'Danger Leakage', 'st': 1, 'pr': 18, 'temp': 56, 'hu': 37}
Published data Successfully: $s {'s': 558, 'm': 'Normal', 'st': 0, 'pr': 17, 'temp': 74, 'hu': 78}
Published data Successfully: $s {'s': 358, 'm': 'Normal', 'st': 0, 'pr': 17, 'temp': 43, 'hu': 13}
Published data Successfully: $s {'s': 1285, 'm': 'Danger Leakage', 'st': 1, 'pr': 14, 'temp': 79, 'hu': 13}
Published data Successfully: $s {'s': 504, 'm': 'Normal', 'st': 0, 'pr': 13, 'temp': 7, 'hu': 0}
Published data Successfully: $s {'s': 779, 'm': 'Normal', 'st': 0, 'pr': 22, 'temp': 52, 'hu': 100}
Published data Successfully: $s {'s': 861, 'm': 'Normal', 'st': 0, 'pr': 23, 'temp': 59, 'hu': 44}
Published data Successfully: $s {'s': 278, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 59, 'hu': 94}
Published data Successfully: $s {'s': 1167, 'm': 'Danger Leakage', 'st': 1, 'pr': 12, 'temp': 43, 'hu': 4}
Published data Successfully: $s {'s': 611, 'm': 'Normal', 'st': 0, 'pr': 23, 'temp': 73, 'hu': 93}
Published data Successfully: $s {'s': 911, 'm': 'Normal', 'st': 0, 'pr': 22, 'temp': 17, 'hu': 62}
Published data Successfully: $s {'s': 649, 'm': 'Normal', 'st': 0, 'pr': 15, 'temp': 56, 'hu': 86}
Published data Successfully: $s {'s': 1190, 'm': 'Danger Leakage', 'st': 1, 'pr': 24, 'temp': 14, 'hu': 84}
Published data Successfully: $s {'s': 564, 'm': 'Normal', 'st': 0, 'pr': 16, 'temp': 91, 'hu': 64}
Published data Successfully: $s {'s': 924, 'm': 'Normal', 'st': 0, 'pr': 23, 'temp': 47, 'hu': 65}
Published data Successfully: $s {'s': 609, 'm': 'Normal', 'st': 0, 'pr': 18, 'temp': 25, 'hu': 72}
Published data Successfully: $s {'s': 1022, 'm': 'Danger Leakage', 'st': 1, 'pr': 18, 'temp': 76, 'hu': 59}
Published data Successfully: $s {'s': 1373, 'm': 'Danger Leakage', 'st': 1, 'pr': 21, 'temp': 86, 'hu': 47}
Published data Successfully: $s {'s': 961, 'm': 'Normal', 'st': 0, 'pr': 12, 'temp': 25, 'hu': 26}
Published data Successfully: $s {'s': 292, 'm': 'Normal', 'st': 0, 'pr': 15, 'temp': 81, 'hu': 81}
Published data Successfully: $s {'s': 967, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 35, 'hu': 32}
Published data Successfully: $s {'s': 1361, 'm': 'Danger Leakage', 'st': 1, 'pr': 19, 'temp': 67, 'hu': 95}
Published data Successfully: $s {'s': 302, 'm': 'Normal', 'st': 0, 'pr': 18, 'temp': 3, 'hu': 47}
Published data Successfully: $s {'s': 1402, 'm': 'Danger Leakage', 'st': 1, 'pr': 13, 'temp': 34, 'hu': 7}
Published data Successfully: $s {'s': 1426, 'm': 'Danger Leakage', 'st': 1, 'pr': 16, 'temp': 23, 'hu': 4}
Published data Successfully: $s {'s': 396, 'm': 'Normal', 'st': 0, 'pr': 19, 'temp': 96, 'hu': 81}
Published data Successfully: $s {'s': 296, 'm': 'Normal', 'st': 0, 'pr': 15, 'temp': 41, 'hu': 16}
Published data Successfully: $s {'s': 837, 'm': 'Normal', 'st': 0, 'pr': 22, 'temp': 89, 'hu': 93}
Published data Successfully: $s {'s': 445, 'm': 'Normal', 'st': 0, 'pr': 13, 'temp': 91, 'hu': 2}
Published data Successfully: $s {'s': 1199, 'm': 'Danger Leakage', 'st': 1, 'pr': 18, 'temp': 79, 'hu': 88}
Published data Successfully: $s {'s': 1037, 'm': 'Danger Leakage', 'st': 1, 'pr': 12, 'temp': 6, 'hu': 18}
Published data Successfully: $s {'s': 438, 'm': 'Normal', 'st': 0, 'pr': 24, 'temp': 99, 'hu': 93}
Published data Successfully: $s {'s': 861, 'm': 'Normal', 'st': 0, 'pr': 25, 'temp': 91, 'hu': 99}
Published data Successfully: $s {'s': 226, 'm': 'Normal', 'st': 0, 'pr': 25, 'temp': 74, 'hu': 36}
Published data Successfully: $s {'s': 810, 'm': 'Normal', 'st': 0, 'pr': 14, 'temp': 50, 'hu': 50}
Published data Successfully: $s {'s': 1440, 'm': 'Danger Leakage', 'st': 1, 'pr': 23, 'temp': 85, 'hu': 72}
Published data Successfully: $s {'s': 1441, 'm': 'Danger Leakage', 'st': 1, 'pr': 12, 'temp': 99, 'hu': 3}
|
Ln: 5 Col: 0
29°C Cloudy
Search
ENG IN
12:04 04-11-2022
```

# ACCOUNT IN IBM WATSON

IBM Watson IoT Platform

732919ecr113@smartinternz.com  
ID: ipek0

Browse Action Device Types Interfaces

Add Device

## Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
>	<input type="checkbox"/> 12345	Disconnected	ESP32	Device	Nov 1, 2022 12:04 PM	
>	<input type="checkbox"/> 12345	Disconnected	node	Device	Nov 2, 2022 10:53 AM	
>	<input type="checkbox"/> 12345	Connected	nodemcu	Device	Oct 28, 2022 2:44 PM	

Items per page 50 | 1-3 of 3 items

1 of 1 page

# IOT WATSON OUTPUT

IBM Watson IoT Platform

732919ecr113@smartinternz.com  
ID: ipek0

Back

## Device Drilldown - 12345

Connection Information

Recent Events

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
status	{"s":205,"m":"Normal","st":0,"pr":17,"temp":26,"...	json	a few seconds ago
status	{"s":945,"m":"Normal","st":0,"pr":16,"temp":40,"...	json	a few seconds ago
status	{"s":1401,"m":"Danger Leakage","st":1,"pr":21,"t...	json	a few seconds ago
status	{"s":538,"m":"Normal","st":0,"pr":13,"temp":21,"...	json	a few seconds ago
status	{"s":688,"m":"Normal","st":0,"pr":17,"temp":59,"...	json	a few seconds ago

State

